Abstract

A method of removing acid gas components from a gas mixture. Certain embodiments of the method involve bringing the gas mixture into contact with a liquid solvent or reagent for the acid gases in a first turbulent contactor and subjecting the gas mixture and liquid to turbulent mixing conditions. This causes the acid gas to be absorbed by the solvent or reagent. The fluid mixture is passed into a second turbulent contactor and subjected to further turbulent mixing conditions causing further acid gas to be absorbed by the solvent or reagent. Optionally the fluid mixture is separated into a gas phase and liquid phase.